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February 17, 2021

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

(Docket Nos. AD18-7-000 and RM18-1-001)

COMMENTS OF THE AMERICAN NUCLEAR SOCIETY

Pursuant to the Federal Energy Regulatory Commission's ("FERC" or "Commission") rules, the American Nuclear Society ("ANS") respectfully submits these comments.

As the voice of America's nuclear professionals since 1954 and representing an active membership of more than 10,000 nuclear engineers and scientists, ANS recommends that the Commission consider recognizing the reliability and resiliency benefits that carbon-free nuclear electricity generation provides to the bulk power system.

Nuclear power plants generate a dispatchable and reliable supply of carbonfree baseload power that can be called upon at any time to meet demand for electricity. This is a unique capability for a zero-carbon energy technology.

Nuclear energy operates around the clock. According to 2020 data from the U.S. Department of Energy, nuclear energy has the highest capacity factor of any other energy source in the U.S. – with nuclear power plants generating at their maximum output 93.5% of the time during the year. Natural gas-fired generators have the second highest capacity factor at a much lower 56.8%.¹

During the most extreme weather events, such as a blizzard or hurricane, energy-dense and fuel-secured reactors can help keep the lights on. Nuclear power plants can also help to quickly restore power in wake of a blackout.

¹ 22 April 2020, "Nuclear Power is the Most Reliable Energy Source and It's Not Even Close," U.S. Department of Energy, Office of Nuclear Energy,

https://www.energy.gov/ne/articles/nuclear-power-most-reliable-energy-source-and-its-not-even-close

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Other energy sources are more sensitive to sudden shifts in the weather as their energy supplies are interruptible or dependent upon favorable weather conditions. For instance, cold snaps can halt intermittent renewable generation or constrain the flow of energy supplies for "just-in-time" fossil fuel-fired generation.

Throughout the U.S., especially in the northeast, extreme cold weather can lead to blackouts when too much natural gas is diverted away from supplying power plants to heating homes. In such situations, nuclear generation helps to stave off more power outages from occurring by relieving some of this wintertime demand for natural gas.

Respectfully Submitted,

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